

Developments in AIHA PAT Programs Beryllium Proficiency Analytical Testing (BePAT) Program

Natasha Mugambwa

**Fourth International Symposium
on Beryllium Particulates and Their Detection
October 2012**



**AIHA PROFICIENCY ANALYTICAL
TESTING PROGRAMS**

Current BePAT Program Analytes

- Rounds may contain a varied combination of beryllium acetate and beryllium oxide filters each Round
- Samples not identified as to which type beryllium compound is on filters.



Transition of BePAT Program Analytes

- July 2011 - the second pilot opened Round 25
- Included a BeO filter at a lower concentration.
- Certified value of BeO sample 0.477 μ g/filter
- Acceptance range - 0.358 – 0.596.



Transition continued

- 44 total participants in round 25
- 5 participants had values < 25% of Certified Value for BeO
- PAT Board reviewed round data
- Conclusion – Program participants capable of safely analyzing BeO samples using appropriate digestion and analysis methods



Transition continued – BePAT 28

- BeO officially included in 2012 beginning with BePAT 28
- 2 BeO samples included: Certified Values of 2.01 and 13.3 $\mu\text{g}/\text{filter}$.
 - Lower BeO sample – 2 low results and 3 high results
 - Higher BeO sample – 4 low results and 2 high results
- 38 out of 42 participants passed the round



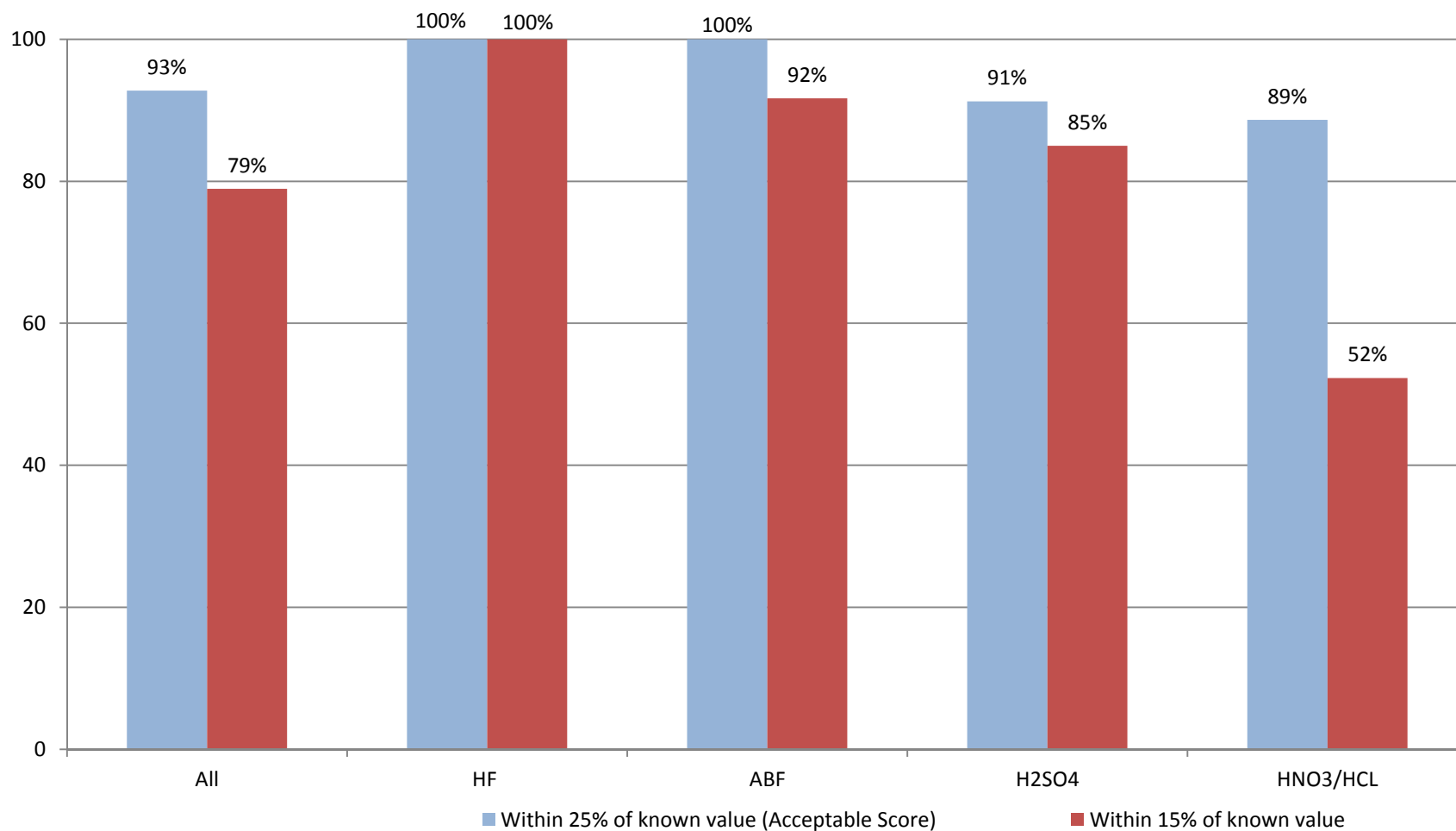
Transition continued – BePAT 29

- BePAT 29 – 2 BeO filters included.
- Certified Values of 0.152 and 21.1µg/filter.
 - Higher BeO sample – 1 low results and 2 high results
 - Lower BeO sample – 2 low results and 2 high results
- 39 out of 42 participants passed the round



Performance of Laboratories on Be Oxide PATS (Overall and By Primary Reagent Used)

Displayed percentages are per sample, not passing score of a round (PAT round failure = 2 or more samples outside of 25%)



General Transition Information

- Minimal change in participation with the transition to the combination of analytes.
- Some participants still having difficulties especially with the low concentration samples
- AIHA PAT Programs continues to work with Program subcontractor – RTI International – to improve participant experience.



BePAT Program - Next Steps

- Consider tightening limits set at Program's inception.
 - PAT Board to review the Program's +/- 25% limits in 2013

